CLAIMS

Claims 1-19 and 21 are presently pending in the application as indicated hereafter.

In the Claims

1. (Previously Presented) An appliance for cooking food under pressure, the appliance comprising:

a vessel and a lid for being fitted and locked on said vessel in order to form a leaktight cooking enclosure;

at least one jaw for locking the lid relative to the vessel;

means for driving said at least one jaw between a locking position and an unlocking position; and

a module for fitting on and releasably securing to the lid, said module including a device for controlling locking and unlocking of the lid relative to the vessel.

2. (Previously Presented) The cooking appliance according to claim 1, further comprising a timer optionally removably mounted on the module.

3. (Previously Presented) The cooking appliance according to claim 2, wherein the module includes a pressure regulator valve:

which is arranged within the module so as to be in leaktight communication with a regulator opening formed through the lid;

which is responsive to the pressure that exists inside the cooking enclosure; and

which is mounted to move between two stable abutment positions, a first position in which it closes off communication from the enclosure to the outside so long as the internal pressure is less than a predetermined pressure P_1, and a

second position in which it puts the inside of the enclosure into communication with the outside via a steam outlet as soon as the internal pressure reaches substantially the predetermined pressure P_1.

4. (Previously Presented) The cooking appliance according to claim 3, wherein the module incorporates a pressure sensor and/or a temperature sensor.

5. (Previously Presented) The cooking appliance according to claim 4, wherein the temperature sensor is disposed in the vicinity of the steam outlet so as to sense the increase in temperature that results from steam passing through the steam outlet.

6. (Previously Presented) The cooking appliance according to claim 5, wherein the temperature sensor is functionally connected to the timer so as to cause it to be triggered as soon as the temperature rise is sensed.

7. (Previously Presented) The cooking appliance according to claim 1, wherein the module incorporates an excess pressure safety valve:

which is arranged within the module so as to be in leaktight communication with a pressure relief opening formed through the lid;

which is responsive to the pressure that exists inside the cooking enclosure; and

which is mounted to move between two stable abutment positions, a first position in which said safety valve closes off communication from the enclosure to the outside so long as the internal pressure is below a predetermined pressure P_2, and a second

position in which it puts the inside of the enclosure into communication with the outside as soon as the internal pressure reaches substantially the predetermined pressure P_2.

8. (Previously Presented) The cooking appliance according to claim 1, wherein the module incorporates the driving means for driving the at least one jaw.

9. (Previously Presented) The cooking appliance according to claim 1, wherein the module incorporates the at least one jaw.

10. (Previously Presented) The cooking appliance according to claim 1, wherein:

the at least one jaw is mounted to be moved in translation by at least one respective drive arm between the locking position and the unlocking position; and

the device for controlling locking and unlocking comprises a main control member mounted to move in translation and an intermediate transmission part positioned to turn freely relative to the main control member and to the driving means, so as to be turned by the main control member in order to engage the driving means so as to govern the displacement thereof.

11. (Previously Presented) The cooking appliance according to claim 10, wherein the module incorporates opening/closing safety means which are arranged within the module so as to be in leaktight communication with a safety opening formed through the lid, the position thereof being responsive to the pressure or the temperature that exists in the cooking enclosure, said safety means being mounted to move between two stable abutment positions, a first position in which said safety means puts the inside of the enclosure into communication with the outside below a predetermined internal

pressure P_3, and a second position in which it closes off communication from the enclosure to the outside when the pressure P_3 is reached, in order to enable the pressure inside the appliance to rise and cooking to take place.

12. (Previously Presented) The cooking appliance according to claim 11, wherein the intermediate transmission part is shaped so as to co-operate with the safety means so that said safety means prevent the intermediate transmission part from turning and thus prevent the lid from being unlocked while the internal pressure is greater than or equal to the pressure P_3, said intermediate transmission part also being shaped to prevent the safety means from reaching its position in which it closes off communication from the enclosure to the outside when said intermediate transmission part is in a position other than its position corresponding to locking.

13. (Previously Presented) The cooking appliance according to claim 11, wherein the module incorporates bistable leakage means:

which are arranged within the module so as to be in leaktight communication with a leak opening formed through the lid; and

which are suitable for taking up firstly an open position allowing air to leak from the inside of the cooking enclosure to the outside, and a closed position corresponding to no leakage of air to the outside.

14. (Previously Presented) The cooking appliance according to claim 13, wherein the bistable leakage means are integrated in the safety means.

15. (Previously Presented) The cooking appliance according to claim 14, wherein the bistable leakage means are integrated in a pressure gauge rod and include, as a moving shutter element, a bimetallic strip supported by said pressure gauge rod.

16. (Previously Presented) The cooking appliance according to claim 13, wherein the bistable leakage means are means for venting air from the appliance.

17. (Previously Presented) The cooking appliance according to claim 1, wherein the module is fixed to the lid by means of a screw-and-nut system that tightens progressively in co-operation with a fastening opening formed through the lid.

18. (Previously Presented) The cooking appliance according to claim 17, wherein the fastening opening is formed substantially at the center of the lid.

19. (Previously Presented) The cooking appliance according to claim 1, further comprising two jaws mounted to move radially on the lid by two respective drive arms between the locking position and the unlocking position, each of said drive arms (5) being provided with an axial guide stud, wherein the module comprises:

a seat presenting an inside face and an opposite outside face, said seat providing an interface with the lid when the module is fitted on and secured to the lid, said seat comprising:

an excess pressure safety valve;

a pressure regulator valve provided with a user-adjustable rating system;

a steam outlet duct starting downstream from the pressure regulator valve and having a temperature sensor mounted in the vicinity thereof;

a one-piece assembly including air venting means integrated in a pressure gauge rod;

a fixing pin extending substantially from the center of the outside face in order to secure the module releasably to the lid;

an assembly pin extending substantially from the center of the inside face, and on which there is pivotally mounted a pivoting plate as an intermediate transmission part, the pivoting plate provided with two oblong drive slots disposed symmetrically about the assembly pin, said oblong drive slots co-operating with two respective rectilinear oblong slots formed radially in the seat to define two engagement openings for engaging each of said guide studs; and

an opening pushbutton mounted to move radially relative to the assembly pin and including an oblong drive orifice extending obliquely relative to the radial direction and co-operating with a guide peg secured to the pivoting plate so that radial displacement of the opening pushbutton causes the pivoting plate to turn, thereby causing the engagement openings to move radially and entrain the guide studs and thus the arms and the jaws to the unlocking position; and

a top cap which covers the seat and all of the elements that are mounted therewith, said top cap comprising:

a housing for receiving a timer provided with at least one electrical connection tab functionally connected to the temperature sensor; and

an axially movable closure pushbutton.

20. (Canceled)

21. (Previously Presented) A module comprising:

a device for controlling locking and unlocking of a lid relative to a vessel of an appliance for cooking food under pressure, the module configured to fit on and releasably secure to the lid, and wherein the appliance includes at least one jaw for locking the lid relative to the vessel to form a leak-tight cooking enclosure and means for driving the at least one jaw between a locking position and an unlocking position.